COMPUTED BY: PS COHEN	DATE: 9/11/03
CHECKED BY: CHL	DATE: 11/7/03

PROJECT REFERENCE NO.	SHEET NO.
B-2963	3A

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE 350	SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	TYPE III	XV	GRAU 350	M-350	XIII	CAT-A	VI MOD	BIC					
-L-	18+10.701	23+48.201 (BR)	RT	537.5			19+50	23+48.201 (BR)	6'-4"	11	518.75'		9'		1		1										
-L-	19+09.849	23+59.849 (BR)	LT	450			23+59.849 (BR)	20+50	6'-4"	11		431.25'		9'	1		1										
-L-	26+25.201 (BR)	34+25.201	RT	800			26+25.201 (BR)	33+00	6'-4"	11		781.25'		9'	1		1										
-L-	26+36.804 (BR)	32+86.804	LT	650			31+50	26+36.804 (BR)	6'-4"	11	631.25'		9'		1		1										
		SUB-TOTAL		2437.5											4		4										
		ANCHOR DEDUCTION		-275																							
		TOTAL		2162.5																							
		SAY		2187.5																							

ANCHOR DEDUCTIONS
GRAU-350 4@50 = 200
TYPE III 4@18.75 = 75
5 ADDITIONAL GUARDRAIL POSTS

SUMMARY OF ASPHALT PAVEMENT REMOVAL

IN SQUARE YARDS

LOCATION	AREA
STA 11+25 - STA 17+50	1424
STA 22+50 - STA 23+65	179
STA 26+20 - STA 27+00	133
STA 34+25 - STA 35+25	222
TOTAL	1958
SAY	2055

SUMMARY OF ASPHALT PAVEMENT BREAKING

IN SQUARE YARDS

LOCATION	AREA
STA 17+50 - STA 22+50	889
STA 27+00 - STA 34+25	1611
TOTAL	2500
SAY	2625

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
L STA 10+18.00 TO L STA 23+65 (BRIDGE)	413		5170	4757	
L STA 26+20 (BRIDGE) TO L STA 38+05.79	224		6600	6376	
-Y- STA 10+40 TO -Y- STA 11+30	404		2		402
SUBTOTAL	1041		11772	11133	402
SUITABLE EXCAVATION FROM OLD ROADBED (SHEET WM-3)	7400				7400
SUBTOTAL	7400				9250
TOTAL	8441		11772	11133	7802
STR. WASTE TO REPLACE BORROW				-1850	
EST. WASTE TO REPL. BORROW				-7802	-7802
EST. SHOULDER MATERIAL			744	744	
PROJECT TOTAL	8441		12516	2225	0
EST 5% TO REPLACE BORROW PIT				111	
GRAND TOTAL	8441			2336	
SAY	8500			2400	
UNDERCUT EXCAVATION		5000			

26-AUG-2004 09:43
R:\Proj\FIN EST\B2963_fin_sum.dgn
BBPayne AT RD193499

RD193499 Thursday August 26 2004 B2963_fin_sum.m BBPayne rd-08oce34